

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

REMARKS

This amendment is submitted in response to the Final Office Action mailed February 15, 2005. Claims 1, 4, 5 and 9-11 remain pending in the application prior to this amendment. Claims 4, 5 and 9 have been amended, new claim 12 has been added, and claim 1 has been canceled by this amendment.

Applicant would like to thank the Examiner, Laura Cole, for the telephone interview with Applicant's representative, David W. Dorton, on April 6, 2005, as noted in the Interview Summary dated April 8, 2005. During the interview, the language of independent claims 1 and 9 was discussed with respect to the recitation of an annular arrangement of bristles. Applicant's representative proposed the claim language set forth in the amended claims, specifically reciting that the claimed dental brush is devoid of bristles interiorly of the recited annular bristle arrangement. Applicant's representative further proposed claim language reciting that the bristles are substantially uniformly spaced in the annular pattern. The Examiner indicated that the proposed claim language would overcome the rejections under 35 U.S.C. §102. The Examiner also suggested that the Specification be amended to make the language therein correspond to the language of the amended claims.

Applicant asserts that the amended claims are in condition for allowance and respectfully request favorable examination. The following remarks are respectfully submitted.

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

Amendments to the Specification

The Specification has been amended, as suggested by the Examiner during the telephone interview on April 6, 2005, to describe the annular arrangement of bristles as now recited in the amended claims. Support for these amendments to the Specification can be found in the Application at page 4, lines 1-6 and with reference to FIGS. 2, 5, and 6. Accordingly, Applicant asserts that no new matter has been added by these amendments.

Claims Rejected Under 35 U.S.C. §102

Claims 1 and 9 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,490,747 to Metwally. Claims 1 and 9 were further rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,092,252 to Fischer et al. Claims 1, 9 and 10 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,996,157 to Smith et al., U.S. Patent No. 1,890,943 to Hoffman, or U.S. Patent No. 2,161,349 to Hadden. Claim 1 has been canceled and replaced with claim 12. Claims 9 and 12 are the only independent claims remaining in the application. Claim 9 has been amended to recite that the dental brush includes a plurality of substantially uniformly spaced bristles disposed in an annular arrangement, and that

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

the brush is devoid of bristles interiorly of the annular bristle arrangement. Claim 12 is directed to a dental brush for a rotary dental device comprising

a brush head;

a plurality of substantially uniformly spaced bristles arranged in an annular pattern defined by inner and outer peripheral borders, said bristles each having an inner end mounted to said brush head and an outer tip, said tips collectively defining an annular concave surface wherein said bristles decrease in length from said outer peripheral border toward said inner peripheral border, said brush head devoid of bristles interiorly of said inner peripheral border of said annular pattern.

During the telephone interview on April 6, 2005, Applicant asserted, and the Examiner agreed, that the references of record do not teach nor suggest a dental brush as recited in amended claim 9 and new claim 12. Specifically, Metwally is directed to an electric toothbrush attachment wherein wood fibers 23 of a solid block of wood are made shorter at center portion of the brush head (depression 24) than the surrounding wood fibers (e.g. at reference numeral 26). Accordingly, Metwally does not teach or suggest a brush head that is devoid of bristles interiorly of an annular arrangement of bristles, as recited in claims 9 and 12.

Applicant further asserts that the other references of record do not teach or suggest the invention recited in claims 9 and 12. Specifically, U.S. Patent No. 6,588,042 to Fritsch et al. does not teach or suggest that the brush disclosed therein has bristles that decrease in length in a direction toward a center of the bristle

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

arrangement, as recited in claims 9 and 12. Accordingly, the brush of Fritsch et al. does not have bristles that can reach fully into the space between teeth in the manner provided by the present invention and depicted at Figures 4-6. Rather, the brush of Fritsch et al. suffers the very drawback sought to be overcome by the present invention. (See, e.g., Application at page 1, line 30 - page 2, line 11; page 3, lines 25-29; and page 4, line 28 - page 5, line 11.)

Moreover, there is no teaching or suggestion in the references of record to modify Fritsch et al. in a manner that produces the claimed invention. Specifically, U.S. Patent No. 6,347,425 to Fattori et al. is directed to a powered toothbrush wherein groups of bristles are arranged in spaced tufts around a central portion of the brush head. There is no teaching nor suggestion in Fattori et al. to arrange individual bristles in a uniformly spaced, annular pattern. U.S. Patent No. 5,996,157 to Smith et al. is directed to a toothbrush having bristles which are uniformly spaced, but which have different lengths. The different length bristles cause the rotary pad upon which the bristles are located to rotate when a user manually manipulates the brush to engage irregular surfaces of the teeth during brushing. Smith et al. does not teach nor suggest that uniformly spaced bristles be arranged in an annular pattern that is devoid of bristles interiorly of the annular pattern. Rather, the bristle arrangement of Smith et al. depends upon the centrally located bristles to facilitate turning the rotary pad when manipulated against the teeth. For at least these reasons, Applicant asserts that amended claim 9

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

and new claim 12 are not taught or suggested by the references of record. Accordingly, Applicant respectfully requests that the rejection of claim 9 be withdrawn.

Claim 10 depends from independent claim 9 and therefore includes all features recited in claim 9. Claim 10 is therefore in condition for at least the reasons stated above. Accordingly, Applicant respectfully requests that the rejection of claim 10 under 35 U.S.C. §102(b) be withdrawn.

Claims Rejected Under 35 U.S.C. §103

Claims 4, 5, 9 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,092,252 to Fischer et al. in combination with published U.S. Patent Application No. 2001/0016308 to Bachmann et al. or U.S. Patent No. 6,347,425 to Fattori et al. Claims 4 and 5 have been amended to depend from new independent claim 12, and claim 10 depends from independent claim 9. Accordingly, claims 4, 5 and 10 each include the features recited in their respective independent claims.

Applicant asserts that the amendment to claim 9 and the amendments to claims 4 and 5 to now depend from independent claim 12 overcome the rejections under 35 U.S.C. §103(a) for at least the reasons discussed above. Specifically, neither Fischer et al. nor Bachmann et al. teach nor suggest a brush head having bristles arranged in an annular pattern and being devoid of bristles interiorly of the annular pattern, as

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

recited in claims 9 and 12. Fattori et al. does not teach nor suggest a brush head having uniformly spaced bristles arranged in an annular pattern, and the references of record do not teach nor suggest a modification of Fattori et al. that would produce the claimed invention, as discussed above. For at least these reasons, Applicant respectfully requests that the rejections of claims 4, 5, 9 and 10 under 35 U.S.C. §103 be withdrawn.

New Claim

New claim 12 has been added by this amendment. Support for new claim 12 can be found in the Application at page 4, lines 1-6 and with reference to FIGS. 2, 5, and 6. Applicant asserts that new claim 12 is in condition for allowance for at least the reasons discussed above.

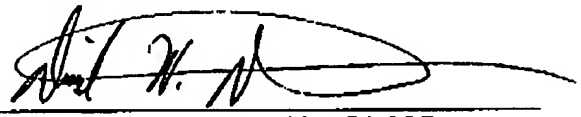
In view of the foregoing amendments to the claims and remarks given herein, Applicant respectfully believes this case is in condition for allowance and respectfully requests allowance of the pending claims. If the Examiner believes that the language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Application No. 10/624,238
Final Office Action Mailed February 15, 2005
Amendment dated April 26, 2005

Applicant is of the opinion that no additional fee is due as a result of this amendment. If any charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

By: 
David W. Dorton, Reg. No. 51,625

DWD:knb
2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202
(513) 241-2324 (voice)
(513) 241-6234 (facsimile)